

1. The rumble feature can be useful when the robot runs too close to people, sending a signal to remind the operator to avoid hitting individuals in the surrounding environment.
2. Additionally, the rumble feature can serve as feedback for the operator to determine whether they are taking the right action. For instance, the controller of the medical cart robot can vibrate when it opens the wrong drawer.
3. Furthermore, the rumble feature can act as a reminder. For instance, we can program the controller to vibrate continuously when the robot is almost out of battery to prompt the operator to recharge it.